



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,848	06/05/2001	Steve Huang	M4065.0775/P775	7721

7590 09/09/2004
Thomas J. D'Amico
Dickstein Shapiro Morin & Oshinsky
2101 L Street NW
Washington, DC 20037-1526

EXAMINER

WILSON, JACQUELINE B

ART UNIT	PAPER NUMBER
----------	--------------

2612

10

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,848

Applicant(s)

HUANG ET AL.

Examiner

Jacqueline Wilson

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5,9,10,16,20,21 and 27 is/are rejected.
- 7) ☒ Claim(s) 6-8,11-15,17-19 and 22-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 5, 9, 10, 16, 20, 21, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhodes (US 6,140,630).

Regarding Claim 16, Rhodes'630 teaches a pixel array (fig. 2, 200) including a plurality of pixels arranged in rows and columns (col. 2, lines 51-59), a plurality of buses each coupled to pixels in one row of the pixel array (fig. 4, element 42), a first line operative to carry a select voltage (line shown from select voltage VDD, element 36 and 38), a second line operative to carry a row enable voltage (element 86, which is not shown in the figures, is the line that connects the charge pump 302 and 38), a charge pump boost circuit (302) operative to drive the second line to a boosted voltage, the boosted voltage being higher than the select voltage (col. 6, lines 62-67), a plurality of row drivers (fig. 2, element 210, although one is taught, it is inherent that a plurality of row drivers are present in the system to operate the plurality of rows), each row driver coupled to an associated one of the buses (also inherent since the device is coupled to

Art Unit: 2612

210) and including a first circuit (fig. 4, element 38) operative to couple the bus to the first line in response to a row select signal (col. 6, lines 61+), the first circuit including a transistor (38) coupled to the second line (see fig. 4).

Regarding Claim 20, Rhodes'630 teaches the select voltage comprises VDD (fig. 4, select voltage VDD is couple to the first line as discussed in Claim 16).

Regarding Claim 21, Rhodes'630 teaches the select voltage is about 3.3 volts (referred to as 5V; col. 6, line 67), and the boosted voltage is about 4.2 volts (referred to as 6V; col. 8, line 55).

Regarding Claim 27, Rhodes'630 teaches each pixel comprises an active pixel sensor including a photoreceptor and an in-pixel follower transistor (col. 3, lines 45+).

Claim 5 is analyzed and discussed with respect to Claim 16. (See rejection of Claim 16 above.)

Claim 9 is analyzed and discussed with respect to Claim 20. (See rejection of Claim 20 above.)

Claim 10 is analyzed and discussed with respect to Claim 27. (See rejection of Claim 27 above.)

Allowable Subject Matter

3. Claims 6-8, 11-15, 17-19, and 22-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 1-4 are allowed.

The prior art neither teaches nor fairly suggests a method comprising selecting a row from a plurality of rows in a pixel array, opening a path between a first line having a first voltage and a bus through one or more row select transistors, selecting the row for reset, opening a path between a second line having a second voltage and the bus through one or more reset enable transistors, the second voltage being higher than the first voltage, and providing the second voltage to the one or more row select transistors, as claimed in Claim 1.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Wilson whose telephone number is (703) 308-5080. The examiner can normally be reached on 8:30am-5:00pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application/Control Number: 09/876,848

Page 5

Art Unit: 2612

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JBW
08/31/04



NGOC YEN VU
PRIMARY EXAMINER